



Administrative Accountability and Challenges for International Translational Research

2010 Accountability Workshop



AGENDA

- 1. Definitions
- 2. Collaboration Issues
 - 1. Administrative
 - 2. Regulatory
- 3. Compliance
 - 1. Human Subjects
 - 2. Animal protections
 - 3. Conflict of Interest
 - 4. Integrity



The quick harvest of applied science is the usable process, the medicine, the machine.

Lincoln Barnett (1950)

What is translational Science?

"I have a simple definition of translational research: It's the bridge from discovery to delivery".

Eric A. Rose,

Columbia University
Medical Center





Translational Research

"Outside of the medical domain, this mode of research can be applied more generally where researchers seek to shorten the time-frame and conflate the basic-applied continuum to 'translate' fundamental research results iwnto practical applications. It is of necessity a much more iterative style of research

Wikepedia



NSF funding

Supplemental Opportunity for Translational Research in the Academic Community (TRAC) (NSF 10-044)

For a discovery to be successfully translated into a new product or process and attract the sponsorship of or additional support from the commercial/government practitioner communities, the champions of the technology must be able to identify and communicate a development plan linking the concepts at the fundamental level with feasible application scenarios.



Publications

JAMA. 2008;299(2):211-213. Steven H. Woolf, MD, MPA

By some accounts, translational research has become a centerpiece of the European Commission's 6 billion budget for health-related research, and the United Kingdom has invested £450 million over 5 years to establish translational research centers.²





NIH definition

Institutes of Health includes two areas of translation.
One is the process of applying discoveries generated during research in the laboratory, and in preclinical studies, to the development of trials and studies in humans. The second area of translation concerns research aimed at enhancing the adoption of best practices in the community.

TRI is more concerned with enabling multi-disciplinary research to accelerate clinical outcomes, with <u>clinical</u> <u>trials</u> often being the natural step beyond translational research.



There is only one proved way of assisting the advancement of pure science - that of picking men of genius, backing them heavily, and leaving them to direct themselves. James Conant (1945)



Collaboration: Administrative Challenges

International collaboration poses additional contractual challenges because of variation in international rules, laws and regulations. Translational science adds to those challenges because the intent is to have outcomes that build the bridge to development and production.



UW Around the World

<u>UWorld Subsidiaries</u>

Botswana Ethiopia

Guyana Namibia

Mozambique Tanzania

 China Research and Development Enterprise: Beijing

South Africa (under SA law)

Spain and Kenya: In process

Haiti: Proposed

Peru: Early Stage

Special Considerations

- Funding: grant or a contract/fiscal regulations?
- What currency will be used?
- Are there tax considerations (OECD)
- Do you need In-country legal status?
- Dispute Resolution: What laws/arbitration is agreed upon?
- Intellectual Property Protection and Licensing
- Export control and ITAR (International Trade in Arms Regulations)
- International Standards





Methods for working in country (monetary)

- Registration or legal status
- Subcontract
- "find someone you trust"
- Carry cash



Fiscal Guidelines/Requirements

US: Two sets of Common Rules
Contracts-Federal Acquisition Regulations
Grants-Office of Management and Budget
(Circular A-21 and A-110 for Higher
Education)

Research Councils UK

Full Economic Costs

Transparent Approach to Costing



How do you make cash available in countries that don't have well-established banking systems?

Considerations

- Checks issued from US
- Electronic wires to foreign bank account
- Work with local "logistics" firm
- Pay vendors directly from US institution via PO
- Subcontract with foreign institution or non-profit



Is your research operation required to establish legal status in-country?

Considerations

- Legal status may be required to open a bank account, lease space and pay local salaries
- Involve your legal counsel
- Engage in-country legal counsel
- Thoroughly understand risks & benefits of registration options



Dispute Resolution

- Undetermined
- Mediation or Sponsor Decision
- Laws of collaborating country
- International Arbitration Rules (AAA)
- In-country Arbitration Rule



OECD

Organization for Economic Cooperation and Development:

"Country Profiles on Mutual Agreement Procedures: One of the key messages that emerged from the first consultation was the need to improve the transparency of the MAP process."





Intellectual Property

- Paris Convention (1883, 1998)
- Research Councils UK Knowledge Transfer Portal
- US Patent and Trademark Office
- Cost of Protection
- Intellectual Property laws and regulations
 - First to file (foreign)
 - First to Invent (U.S.)
- Humanitarian Purposes
 - Negotiate either in agreement or licence





Intellectual Property

- Office of the Administrator for External Affairs Organization and Agencies For those who wish to seek protection for their intellectual property beyond the borders of the United States of America as well as for those non-US customers who wish to seek patent or trademark protection in the United States of America.
- Patent Cooperation Treaty The Washington Diplomatic Conference on the Patent Cooperation Treaty was held in Washington from May 25 to June 19, 1970. The Patent Cooperation Treaty was signed on the last day of the conference on June 19, 1970. The Treaty entered into force on January 24, 1978, initially with 18 contracting states.[4] The first international applications were filed on June 1, 1978.[4] The Treaty was subsequently amended in 1979, and modified in 1984 and 2001.



US Export Control Laws

- Export Control Administration: Department of Commerce
- International Traffic in Arms Regulations:
 Department of State
- Office of Asset Control: Department of the Treasury

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Export Control Red Flags

- Shipping equipment to a foreign country?
- Collaborating with foreign colleagues in foreign countries?
- Working with a company subject to a US boycott?
- Training foreign nationals in using equipment?
- Using another parties' proprietary information?
- Sponsor approval rights over publications or foreign national participation?

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UK Export Control Organisation

Military equipment such as arms, ammunition, bombs, tanks, imaging devices, military aircraft and warships; • nuclear related items including nuclear materials, nuclear reactors and nuclear processing plant; • dual-use items, ie items designed for civil use but which can be used for military purposes such as certain materials, machine tools, electronic equipment, computers, telecommunication equipment, cryptographic goods, sensors and radar, navigation and avionics equipment, marine equipment and space and propulsion equipment; • chemical weapons precursors, and related equipment and technology; • certain micro-organisms, biological equipment and technology; • goods used in programmes involved in weapons of mass destruction and missiles used for their delivery.



International standards

International Organization for Standardization (ISO), Geneva 18,000 Standards (e.g.9000)

Research and Manufacturing:e.g.

- Good Laboratory Practices (GMP)
- Good Manufacturing Practices (GMP)

Some International partners may have a different set of Compliance issues to deal with!





Compliance Issues with International Partners

P.I. Responsibilities (primary)

- IRB/IACUC (humans and animals)
- Conflict of Interest
- Scientific Integrity
- Antiquities Laws e.g.

Institutional Responsibilities (primary)

- Almost 80 Assurances
- e.g. Drug Free workplace and workforce





MYTH!

Other parts of the world have a different set of values when it comes to the integrity of research and what constitutes research misconduct. They may and will have a different set of policies and practices.





Safety

The European Food Safety Authority
 (EFSA) is an <u>agency of the European</u>
 <u>Union</u> that provides independent scientific advice and communication on existing and emerging risks associated with the <u>food</u> chain



US: FDA

Food and Drug Administration: "Protecting and Promoting Your Health"

Regulates and approves the safety of food, drugs, medical devices, vaccines, cosmetics, tobacco and other health related products and procedures.



European Union

- The European Medicines Agency is a decentralised body of the European Union with headquarters in London. Its main responsibility is the protection and promotion of public and animal health, through the evaluation and supervision of medicines for human and veterinary use.
- All medicinal products for human and animal use derived from biotechnology and other hightechnology processes must be approved via the centralised procedure



IRB Regulation Spaghetti!

"The U.S. regulations are "exported" to other countries and interpreted by researchers...

NBAC has noted that even for domestic researchers, the U.S. regulations are at times difficult t interpret and require clarification...understanding and interpreting ...in other settings could prse even more profound difficulties."

National Bioethics Advisory Commission, Chapter 1, April, 2001





Are researchers complying with U.S. human subject standards in their international research?

Considerations

- Does the host country require its own IRB?
- Are there aspects of local context that must considered?
- Is it truly "informed consent"?
- Is the value to the country clear if human specimens are taken?



Questions?

Which IRB has final authority? No regulation but "follow the money" is standard

Do all IRB regs apply int'l? FDA studies-yes UW generally applied the Common Rule.

Does HIPAA apply? No



Resources for Human Subjects Protection

OHRP website

International Compilation of Human Research Protections, 2010 Edition

Compiled By: Office for Human Research Protections, DHHS

http://www.hhs.gov/ohrp/international



European Commission

Animal Welfare

 For the period 2006-2010, the EU is planning general measures aimed at ensuring animal welfare and protection. The measures will focus on improving standards, developing research and indicators, informing professionals and consumers and taking action at international level



US and UK

- UK Research Councils: Animals Act 1986:The provisions of the Animals (Scientific Procedures) Act 1986, and any amendments, must be observed and all necessary licences must have been received before any work requiring approval takes place.
- US Dept of Health and Human Services, Office of Laboratory Animal Welfare: "The Office of Laboratory Animal Welfare (OLAW) provides guidance and interpretation of the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals, supports educational programs, and monitors compliance with the Policy by Assured institutions and PHS funding components to ensure the humane care and use of animals in PHS-supported research, testing, and training, thereby contributing to the quality of PHS-supported activities.":



Singapore Statement on Research Integrity (July 2010)

"The World Conferences on Research Integrity represent effort to provide guidance for promoting integrity in research throughout the world."

Purpose: "... to establish a much-needed agreement on the basic principles that should inform all research"





Wellcome Trust

"...all research in developing countries should:

- (ensure)...the prospective treatment will or might foreseeably become available to local patients on a sustainable basis.
- (ensure).. prospective treatment will or might foreseeably become affordable locally.
- (ensure)...prospective treatments could be delivered within existing structures."



Conflict of Interest

- Federal Policy
- You may have a Conflict of Interest (COI) if you have a Significant Financial Interest in the sponsor of your research.
- UW must manage, reduce or eliminate any COI on a sponsored project
- Determined by review by University/Research Organization



Scientific Misconduct: U.S.

- Fabrication, falsification or plagiarism in proposing, performing or reviewing research or in reporting results
- It does not include honest error or differences in interpretations or judgments or differences of opinion
- Sequestration of data, materials and files



Responsibilities of Researchers

- To avoid misconduct
- To assure integrity in conducting of research, including proper assignment of credit in publication
- To report instances of misconduct
- To report instances of retaliation against those who bring good faith charges of misconduct



Finland

Misconduct in research is "gross negligence and irresponsibility" e.g. understatement of another's contributions, negligence in referring to earlier findings, publication of same results several times.

Fraud in Science is falsification, fabrication, plagiarism and misappropriation.





Research Councils UK

Good Research Conduct Policy: "The Code, developed after a wide consultation last year with partners across the higher education and research sector, aims to provide clear guidelines to help researchers and research organisations achieve the highest standards possible when carrying out research. Covering a wide range of suggested best practice areas, from the need for appropriate training and development at the early career stage to how to handle the resignation of a researcher under investigation, the Code is designed to fit in with research organisations' own internal procedures."





Conducting Investigations

- "Even within the EU (7th framework) there is no consistency."
- Who takes the lead on investigations?
- Does the institution lead the investigator or is it done by the government?

Global Science Forum, Organization for Economic and Cooperation and Development, Tokyo, Japan, 2007



Thank you!

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